

Jet Propulsion Laboratory
California Institute of Technology



4800 Oak Grove Drive
Pasadena, CA 91109-8099

(818) 354-4321

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TO: Distribution

FROM: David Morris

SUBJECT: Minutes for the Joint Users Resource Allocation Planning Committee Meeting held January 18, 2008.

**NEXT JURAP MEETING:
Thursday, March 20, 2008
JPL Bldg 126, Room 200 at 1pm**

Attendees:

R. Best	L. Fairley	L. Jones	J. Ross	B. Williams
C. Bixemen	D. Finnerty	A. Kniepkamp	N. Sartwell	G. Vernon
S. Chhan	J. Frautnick	M. Machado	M. Slade	K. Yetter
D. Dillard	J. Hall	E. Martinez	C. Ward	K. Zamora
L. Efron	A. Hewitt	D. Morris	S. Waldherr	

The Joint Users Resource Allocation Planning Committee meets monthly to review the status of Flight Projects, the requirements of other resource users, and to identify future requirements and outstanding conflicts. The previous meeting was held on November 15, 2007 at the Jet Propulsion Laboratory.

Introductory Remarks – D. Morris

Welcomed the attendees to the JURAP meeting and stated the agenda to include presentations by L. Jones – POLAR end of mission operations, B. Williams – MESSENGER Mercury Fly-by report. Indicated three missions had declared S/C emergency and were now in safe mode (ULYS, DAWN, MEX). Also mentioned that email distribution sent out for the upcoming RAR DSN Customer Forum for Monday 8:30 a.m. PST February 11, 2008 and awaiting response from all customers.

Briefly discuss the conflict resolution meetings for all Project / Mission Schedulers to catch up to the schedule due to the three launches (PHX, SELE, DAWN) that caused delays in the process this past summer.

Action Items discussed were the Madrid Power Conversion from generator to commercial that requires 12-hour blocks – still attempting to find time, and it has slipped one weekend. Week 21 is scheduled for Phoenix EDL when it arrives at Mars – and schedule has been built to reflect the week.

SPECIAL PRESENTATIONS

Polar End of Mission Operations – L. Jones

Polar in extended mission, orbit-normal attitude, final semi-annual attitude reorientation maneuver to be executed from February 11-15, 2008 and planning end of mission activities.

EOM activities include:

- Engineering tests – instrument reactivations, voltage increases and boom deployments,
- Battery decommissioning – discharge three batteries,
- Propulsion system passivation – expend remaining fuel (Hydrazine) and vent cold Helium pressurant requires more time than propulsive maneuver,
- Instrument deactivation – passivate/turn off thirteen instruments
- Final spacecraft configuration – disable remaining subsystems, final orbit determination

Nominal DNS support requirements have not changed due to the THEMIS science campaign, extended supports are needed for maneuvers and EOM passivation, aspect angle constraints impact supports (such as maneuver segment 2 on February 12), and Polar's orbital precession since launch still favors view periods at the Canberra site.

MESSENGER Mercury Flyby Report – B. Williams

- Successful Mercury flyby 1 on January 14, 2008
- 3 critical mission events in the next 12 months
 - DSM-3 (March 17)
 - Mercury flyby 2 (October 6)
 - DSM-4 (December 6)
 - Plus statistical TCM's around these events
- Optical navigation used for the first time on Mercury Flyby 1
 - Required timely DSN downlink of images from Jan. 9 to Jan. 13
 - All OpNavs were received on schedule
- Current DSN tracking support and data quality is excellent
 - Very quick recovery from Superior Conjunction in November 2007
- Mercury flyby 1 radio metric tracking quality was excellent.
 - High quality Delta-DOR was a key factor in Navigation accuracy
- DSN reacquired two-way tracking within 60s of exit from Earth occultation

Resource Analysis Team***Downtime Status – L. Fairley*****2008-2010 Approved Downtimes**

- SPC-60 downtime for Commercial power installation task.
 - The request for Commercial Power Installation requirements and dates have changed
 - Two 12-hour blocks (0600-1800) each March 29 and 30, April 6 and 7, and April 13 and 14. The April 13 and 14 dates were added. These times are in the schedule and will be worked at the mid range negotiation meetings. A proposal has been sent to the projects and time in some blocks have been changed to try to accommodate project activities.
- Approved DSS-14 Grouting for week 25 in 2008 has been requested to move due to other requirements in that week.
- DSS-55 downtime for Paint Repair beginning in June 2008 for weeks 23 - 28.
- DSS-34 downtime for DSS-34 Azimuth Track Replacement and Ka-Band Phase 2 beginning in June 2008.
 - The request from Cassini to break up this downtime has been denied.
- DSS-65 downtime for Life Extension Elevation for October, November of 2009 for weeks 45 - 48.
- DSS-25 downtime for Ka U/L install for April 2010 for 3 weeks is being moved and proposed for weeks 28 - 31. Requesting an additional week and will be proposed at the next RAR.
- CDSCC 26m antenna, DSS-46 will close as of August 1, 2009.

Changes to 2007 - 2008 Downtime Schedule

All conflicts have been resolved and supports have been completed, scheduled, or cancelled.

- 13-hour complex-wide downtime for SPC-10 Electrical Maintenance is scheduled for DOY 341/2115 – 342/1015. This was cancelled due to GOES spacecraft emergency and will be rescheduled. There is a proposal out for week 8 of 2008.
- Downtime for DSS-43 for Rescue Platform Install is scheduled for DOY 336/2100 – 339/2100.
- Downtime for Grouting is scheduled for DOY 340/1600 – DOY 346/0000.
- ACR S/W install is in the schedule for DOY 25/0000 – DOY 34/0000 weeks 4 & 5 of 2008.
- Downtime for 4 day Grouting is scheduled for DOY 35 – 38 in week 6 of 2008.

All DSN Missions/Users through the INCF/RAR, JURAP or Mid-Range Scheduling Process have agreed to all previous downtime proposals.

For a complete listing of Antenna Downtimes, visit the following link for the RAPSO website:
<http://rapweb.jpl.nasa.gov/planning.html>

RAPS & Mid-Range Status – L. Fairley**Resource Negotiation Status**

- 2007 weeks 04 - 13 (thru 03/30/2008) were released to DSN scheduling as of 01/16/2008.
- 2007 weeks 21 - 24 (thru 06/15/2008) were released to remote users on 01/14/2008.
- 2007 weeks 14 - 20 (thru 05/12/2008) have remaining facility and equipment conflicts.

The Mid-Range Scheduling process has schedules 22 weeks ahead of real-time. Currently, there are 10 weeks of conflict-free schedules. Conflict Resolution is required for the following eight weeks: 04/01/2008 through 06/15/2008.